CLAIMS

1. A method for producing an optical transmission cable from at least one tube (1) inside of which a plurality of optical fibers (2) are arranged, and strengthening elements (3, 4, 5), one of the said strengthening elements, constituting a central strengthening member (4), being arranged at the center of said cable and certain strengthening elements constituting peripheral strengthening members (3), said tube (1) being twisted about said central strengthening member (4) using a tubular machine so as to form a peripheral layer around said central strengthening member (4), the peripheral strengthening members (3) and the tube (1) having diameters sufficiently close to each other to ensure said peripheral layer is homogeneous.

2. The method for producing an optical transmission cable according to claim 1, characterized in that said central strengthening member (4) is first unwound from a reel (B1 to B8) located in the said tubular machine, then passes through a greasing tank (BG) also situated in said tubular machine, and then exits at an end of said tubular machine.

3. The method for producing an optical transmission cable according to claim 1 or 2, characterized in that the optical transmission cable is an aerial cable.

4. The method for producing an optical transmission cable according to claim 3, characterized in that the optical transmission cable is a ground or phase cable.

5. A tubular machine for producing an optical transmission cable, said machine having a plurality of reels (B1 to B9) located inside the tubular machine characterized in that a greasing tank and a guiding device are provided between said plurality of reels (B1 to B9) and an end of said tubular machine, arranged whereby a strengthening element unwinding from a reel (B9) closest to said greasing tank (BG) passes

through said greasing tank (BG) before exiting at an end of the tubular machine.

6. The tubular machine according to claim 5, characterized in that the said reel (B9) located closest to the greasing tank (BG) is designed to receive a central reinforcing member (4).

7. The tubular machine according to claim 5 or 6, characterized in that all of said reels (B1 to B9) have the same size whereby said tubular machine maintains a constant diameter.

8. A system for producing an optical transmission cable having at least two peripheral layers, comprising an inner peripheral layer and an outer peripheral layer, said outer peripheral layer being twisted about said inner peripheral layer, implementing a method according to any one of claims 1 to 4 and preferably using the tubular machine according to any one of claims 5 to 7.

9. The system according to claim 8, characterized in that the two peripheral layers are provided using two tubular machines arranged one after the other.

10. The system according to claim 8, characterized in that the two peripheral layers are obtained using two separate steps employing two tubular machines.

11. The system according to claim 8, characterized in that the inner peripheral layer is obtained using a tubular machine and said outer peripheral layer is obtained using a planetary machine, the tubular machine and planetary machine being arranged one after the other.

12. The system according to claim 8, characterized in that the said inner peripheral layer is produced during a first step using a tubular machine and said outer peripheral layer is produced during a second step separate from said first step, using a planetary machine.

13. The system according to any one of claims 9 -12, characterized in that the said two machines rotate in mutually opposite directions.